

J. E. Lousley and plants alien in the British Isles

D. McCLINTOCK

Bracken Hill, Platt, Sevenoaks, Kent, TN15 8JH

INTRODUCTION

I have been asked to write on Ted Lousley's contribution to the knowledge of alien plants in our islands. This was possibly his major work. To do it justice demands more time, research and space than is available: all the more grateful therefore am I to Mrs Lousley, Dr J. G. Dony and Mr D. H. Kent for reading the draft of this summary.

Lousley was nearly omnivorous in his interests in wild plants, whether called native in this country or not. In later life he was stricter in his views on what he considered to be wild or naturalized, approaching the old professional attitudes. All the same he would always be glad to add to his collection specimens of marginal plants he rejected as wild. He did not know garden plants really well (too few field botanists do), so he was least at home among garden throw-outs and with successful ground-cover and surviving hedge-plants. Thus he missed the gardeners' name, the correct one, *Hebe* × *franciscana*, for the hedging Veronica well-known in the south-west, calling it *H.* × *lewisii* (Green 1973). But his knowledge widened here too, especially in recent years, and his last note (1976), on *Fagopyrum dibotrys*, was very useful.

It is probably true to say that he actually first found relatively few new aliens or sources for them: to do so indeed is usually a matter of luck and opportunity. But it is equally true to say that he knew a great deal about them (Lousley 1953a). As soon as any were found, he was at once eager, eyes alight, to see and collect them himself; and his expertise often enabled him to name at sight plants which defeated others, and to say what the telling characters were. Indeed it might be said that the greatest fillip to the knowledge of our alien flora came from the enthusiasm he radiated and infectiously passed on, an enduring influence with many able members of the younger generation building on his work. It was always a pleasure to go in the field with him and perhaps never more usefully than among the aliens he knew so well—and with his deep knowledge of the British flora he could detect an alien origin or form in an otherwise native species.

His strength in all this stemmed from his assiduous training, his wide and long experience, his excellent memory and eye, his orderly methods, his remarkable card index (now at the British Museum (Nat. Hist.)) and immense, 25,000 strong, herbarium (now at Reading University) with so many critical sheets named by specialists (and, in addition, he distributed *exsiccata* widely), his extensive library, his large collection of photographs and, for aliens, the seedlings and other plants he grew on in a cold frame or in the open bed in his small garden (and still leaving room for purely decorative plants, so that it always looked bright and tidy). A story typical of his ability and way of putting things is told of 'two flashy vetches'. A national institution named them *V. cracca*; the finder was not satisfied. A second expert said *V. cracca* and *V. tenuifolia*; finder still dissatisfied. Then Lousley was asked. With his own particular gleam he snorted '— says that, does it? Well, it can think again. One is *V. villosa* and the other *V. dasycarpa*'.

RUMEX

He completed his scholarly papers on this, understandably neglected, genus as the war was being waged (Lousley 1939, 1944). Here he cleared up such matters as the distinctions between *R. patientia* and *R. cristatus* (*R. graecus*), and the alien subspecies of *R. obtusifolius* and *R. pulcher*. He also detected other aliens, such as *R. confertus*, hybridizing with British species (Lousley 1955, Lousley & Williams 1975): indeed he named *R. wrightii* (*R. conglomeratus* × *R. frutescens*

(*R. cuneifolius*) as new to science (Lousley 1953b)—it is still growing in his garden. *R. triangularis* (*R. salicifolius*) was another alien dock he usefully drew attention to; and he disposed of many erroneously applied names in these still superseded papers.

GRAIN ALIENS

After the war, lease-lend seed, notably of carrots, contained impurities welcome to the botanist, who would be beckoned to suitable fields by waving stems of *Echinochloa* or upstanding Amaranths. *Amaranthus quitensis* was one species noticed, I think, first by Lousley. But these were not strictly grain aliens: they occurred elsewhere, notably in docks and sidings.

His good friend Dr R. C. L. Burges (1901–59) for long kept close watch on alien plants resulting from the malting activities at Burton on Trent and Lousley was a frequent visitor there, especially after the war. One area where foreign grain was landed was the Cleethorpes/Grimsby/Humberstone district of Lincolnshire. His detailed check list of 1955/6 from there is included on pp. 299–302 of *The flora of Lincolnshire* (Gibbons 1975). The flow of unusual plants resulting from the mixtures bird-lovers ever increasingly put out, and the birds missed, was carefully observed by Lousley and there is no doubt a full tally in his herbarium.

THE BOX HILL BOMB CRATER

It was in 1948 that Lousley, with his frequent companion Rex Graham, first visited the wood on the north slope of Box Hill (which, it later proved, had been first noticed in 1945). In it were some score of foreign plants, as well as native species, that did not belong to the district. Guesses abounded to account for their presence, particularly as it was wartime—most of them were central European; and the press added other extraordinary theories (Lousley 1951, p. 6). 'The mystery grows on the hole in the hill' headlined the *Daily Mirror* on 10th April 1950. Lousley himself wrote various accounts, including an illustrated article in the *Illustrated London News* for 19th August 1950. Gradually natural succession took over and the aliens were eliminated, although some clung on for many years. Eventually the man came forward who had managed to obtain this surprising assortment of seeds, and to sow them and to get them to grow in the crater.

WOOL ADVENTIVES

The discovery by Dr J. G. Dony immediately after the war of the wealth of alien plants in wool waste (shoddy) used in market gardens on light soils in Bedfordshire opened up a large field for research. The story of how the source of these was traced back to the wool districts of the West Riding was told by Lousley (Lousley & Dony 1952, Lousley 1958, 1961). This in turn led to the rediscovery of the areas on Tweedside where Hayward & Druce (1919) had gathered similar plants a generation earlier, and to other sites being found in about two dozen vice-counties. Many of the plants were in fact European, Mediterranean mostly, which had been carried in the fleeces of the Merino and other sheep taken to the Antipodes when the sheep-rearing industry was founded in the last century (*c.f.* Lousley 1960). Some of these species had there developed their own varieties, such as the large and nutritious *Trifolium subterraneum* var. *oxaloides*; but most were identical with their congeners. These appeared mixed with native Antipodean species, many of which had not been properly delimited in their own countries.

The bulk were Australian, but others came from elsewhere, notably S. America and S. Africa. With such a huge potential area to search, the difficulties of finding correct names were immense. But Lousley was in the forefront, right to the end of his life; he and I were revisiting the Worcestershire shoddy fields in his last September. The search for these aliens became an esoteric enthusiasm for an eager, mostly amateur band. Their discoveries were collated and published by Lousley in 1961; after 14 years work no less than 529 species were listed, and that excluded many varieties and, inevitably, many which had not been named. His up-dated manuscript of this list

is now with Mr E. Clement (who has also his notebooks with lists of alien species seen from '23.10.55 to 30.10.64'). In the 15 years since, the work has continued, with Lousley sharing his knowledge—too much of which never got into print.

BOMBED SITES

No reference to Lousley's work on alien plants can omit his careful recording of those which ever increasingly colonized the bombed sites of the City of London during and after the last war, although only a minority of these were not species wild somewhere in Britain. In *The natural history of the City* (Fitter & Lousley 1953) he listed 'at least 269 wild flowers, grasses and ferns' within the Square Mile, some of them sown garden plants. Perhaps his favourite was the re-appeared *Sisymbrium irio*, which he watched for years after it was found in 1947, and which is still to be seen. Another was the pretty, but invasive, poppy *Papaver atlanticum*, now to be seen in many parts of Britain. This was first noted in the City in the area of Gresham Street in 1946 and six years later was common. Lousley took particular care naming it (Lousley 1949). Earlier it had been referred by Dr Turrill to *P. lateritium*. Various attempts were made to find distinctions that did not exist to justify the two names; but only after Turrill's death in 1961 was it finally established that Lousley was right and all the plants were *P. atlanticum*.

Two other London plants are specially connected with him. One is the American willow-herb *Epilobium ciliatum* (*E. adenocaulon*), now so abundant, which he was the first to notice there, in 1945 (Kent 1975); the other, the 'New hybrid *Senecio* from the London area' (Lousley 1946) *S. squalidus* × *S. viscosus*. This he first noted in 1943, on the way to tea with his parents, just after the late N. Y. Sandwith, who agreed that Lousley should be the one to name it. This he did, as *S. × londonensis*.

ISLES OF SCILLY

The warmest parts of our islands naturally harbour most exotic, more or less tender, species, usually coming via gardens and making themselves at home in the wild. The Isles of Scilly are perhaps the most extreme example we have, so Lousley's work there had special problems to contend with. Prominent among these were the 'Mesems', the showy succulents of the Aizoaceae. These were described in no British book (*Carpobrotus edulis* apart), in no one work anywhere. They are in any event difficult to name, incompletely known, unmonographed throughout their range and make ghastly herbarium specimens. More work is needed on *Carpobrotus*, but Lousley brought welcome clarity into the otherwise obscure field of the small-flowered genera. They are well set out and depicted in his *Flora* (1971).

His *Flora* does not include all the species which several other people consider adequately naturalized there, such as *Chrysocoma coma-aurea*, *Aristea cf. caerulea* or *Watsonia ardernei*, but this is just a reflection of his hardening attitude as to what constituted a naturalized plant. His '*Fascicularia pitcairniifolia*' there is *Ochagavia carnea* (McClintock 1975).

RUBBISH TIPS

The B.S.B.I. and the London Natural History Society have run visits to the various municipal rubbish dumps around the metropolis for many years. Lousley must have attended dozens of these meetings, quite apart from his private visits, and his presence was always welcomed for his unfailing friendliness and helpfulness. Here too he passed on his enthusiasm so well that the next generation is carrying on and developing his work in a heart-warming way, as ever new species are detected. The constituents of these dumps have varied over the years with the supply, notably from the fashions in garden plants and the constituents of bird-seed mixtures.

I accompanied Lousley on many trips all round our island and, as many know, he was a discerning, shrewd, cheerful, stimulating and efficient companion, with a very broad base to his knowledge. He had specimens of nearly all the aliens I collected without him and rightly so, for,

as I have said elsewhere, I owe a great deal to him over very many years. I only wish this account could have been as thorough as his beneficial influence deserved: a thorough examination of his herbarium should be rewarding.

REFERENCES

- FITTER, R. S. R. & LOUSLEY, J. E. (1953). *The natural history of the City*. London.
- GIBBONS, J. (1975). *The flora of Lincolnshire*. Lincoln.
- GREEN, P. S. (1973). *Hebe*, in GREEN, P. S., ed. *Plants wild and cultivated*. pp. 164–166. London.
- HAYWARD, I. M. & DRUCE, G. C. (1919). *The adventive flora of Tweedside*. Arbroath.
- KENT, D. H. (1975). *The historical Flora of Middlesex*, pp. 85, 311. London.
- LOUSLEY, J. E. (1939). Notes on British Rumices, 1. *Rep. botl Soc. Exch. Club Br. Isl.*, **12**: 118–157.
- LOUSLEY, J. E. (1944). Notes on British Rumices, 2. *Rep. botl Soc. Exch. Club Br. Isl.*, **12**: 547–585.
- LOUSLEY, J. E. (1946). A new hybrid *Senecio* from the London area. *Rep. botl Soc. Exch. Club Br. Isl.*, **12**: 869–874.
- LOUSLEY, J. E. (1949). *Papaver atlanticum* (Ball) Cosson. *Watsonia*, **1**: 117.
- LOUSLEY, J. E. (1951). Botanical records for 1950. *Lond. Nat.*, **30**: 4–8.
- LOUSLEY, J. E. (1953a). The recent influx of aliens into the British flora, in LOUSLEY, J. E., ed. *The changing flora of Britain*. Oxford.
- LOUSLEY, J. E. (1953b). *Rumex cuneifolius* and a new hybrid. *Watsonia*, **2**: 394–397.
- LOUSLEY, J. E. (1955). Botanical records for 1954. *Lond. Nat.*, **34**: 2–6.
- LOUSLEY, J. E. (1958). Alien plants introduced by the Yorkshire wool industry. *Naturalist, Hull*, **1958**: 77–81.
- LOUSLEY, J. E. (1960). How sheep influence the travel of plants. *New Scient.*, **8**: 353–355.
- LOUSLEY, J. E., compiler. (1961). A census list of wool aliens found in Britain, 1946–1960. *Proc. bot. Soc. Br. Isl.*, **4**: 221–247.
- LOUSLEY, J. E. (1971). *Flora of the Isles of Scilly*. Newton Abbot.
- LOUSLEY, J. E. (1976). Three species of Polygonaceae established in Britain. *Watsonia*, **11**: 144–146.
- LOUSLEY, J. E. & DONY, J. G. (1952). The travels of plants. *Beds. Mag.*, **3**: 185–189.
- LOUSLEY, J. E. & WILLIAMS, J. T. (1975). *Rumex* L., in STACE, C. A., ed. *Hybridization and the flora of the British Isles*, pp. 278–292. London.
- McCLINTOCK, D. (1975). A note on *Fascicularia*, *Ochagavia* and *Rhodostachys*. *Watsonia*, **10**: 289–290.

(Accepted November 1976)